SA-VE522/VE525/WMS525/ SS-MS525/V521

SERVICE MANUAL

Ver 1.1 2001.08

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
Chinese Model

- SA-WMS525 and SS-MS525 is the micro satellite system in SA-VE522/VE525.
- SS-V521 is SS-MS525 which can be purchased alone.

SA-WMS525

SS-MS525
SS-V521

SPECIFICATION

SS-MS525 (front, center, and rear speakers)
SS-V521

Speaker system	Full range x 2, magnetically shielded
Speaker units	5 cm (2 in.), balance drive type
Enclosure type	Bassreflex
Rated impedance	8 ohms
Power handling capacity	
Maximum input power:	120 watts
Sensitivity level	87 dB (1 W, 1 m)
Frequency range	120 Hz - 20,000 Hz
Dimensions (w/h/d)	When attached speaker grille: Approx. 89 x 144 x 130 mm (3 5/8 x 5 3/4 x 5 1/8 in.) When attached supplied speaker stand: Approx. 89 x 128 x 143 mm (3 5/8 x 5 1/8 x 5 3/4 in.) (pointed upwards) Approx. 89 x 122 x 143 mm (3 5/8 x 4 7/8 x 5 3/4 in.) (pointed downwards)
Mass	When attached speaker grille: Approx. 750 g (1 lb 10 oz) When attached supplied speaker stand: Approx. 850 g (1 lb 14 oz)

SA-WMS525 (subwoofer)

Speaker system	Active subwoofer, magnetically shielded
Speaker unit	Woofer: 20 cm (8 in.), cone type
Enclosure type	Advanced SAW type
Reproduction frequency range	26 Hz - 250 Hz
Amplifier section	
Rated Power Output	120 W (8 ohms 20 Hz - 20 kHz, THD 0.8%)

Inputs

LINE IN (input pin jack)
SPEAKER IN (input terminals)

Outputs

LINE OUT (output pin jack)
SPEAKER OUT (output terminals)

General

Power requirements	
USA and Canada:	120 V AC, 60 Hz
Europe, Australia and Chinese E:	220 - 230 V AC, 50/60 Hz 110-120V/220-240V AC, 50/60Hz
Power consumptions	90 W 1 W (standby mode)
Dimensions (w/h/d)	Approx. 230 x 392 x 464 mm (9 1/8 x 15 1/2 x 18 3/8 in.), including front grille
Mass	Approx. 13.2 kg (29 lb 2 oz)

Supplied accessories

SA-VE525
Foot pads (16)
Center speaker stand (1)
Screw (for the center speaker stand) (1)
Washer (for the center speaker stand) (1)
Audio connecting cord (1)
Speaker connecting cords, 10 m (32 ft 9 3/4 in.) (2)
Speaker connecting cords, 3.5 m (11 ft 6 in.) (3)
Speaker connecting cords, 2.5 m (8 ft 2 1/2 in.) (2)
SA-VE522
Foot pads (8)
Audio connecting cord (1)
Speaker connecting cords, 3.5 m (11 ft 6 in.) (2)
Speaker connecting cords, 2.5 m (8 ft 2 1/2 in.) (2)
SS-V521
Foot pads (4)
Speaker connecting cords, 10m (32 ft 9 3/4 in.) (1)

Design and specifications are subject to change without notice.

ACTIVE SUBWOOFER

9-873-807-12
2001H0200-1
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Sony Corporation
Home Audio Company
Shinagawa Tec Service Manual Production Group

SONY®

SAFETY CHECK-OUT
(US model)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer: Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.

2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

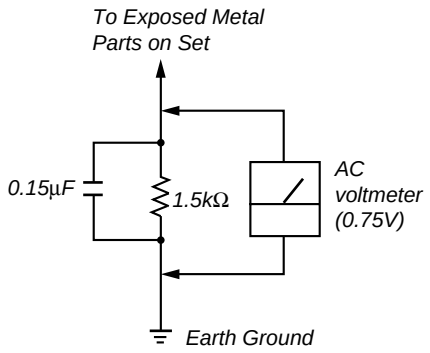

Fig. A. Using an AC voltmeter to check AC leakage.

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4. ELECTRICAL PARTS LIST 8

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

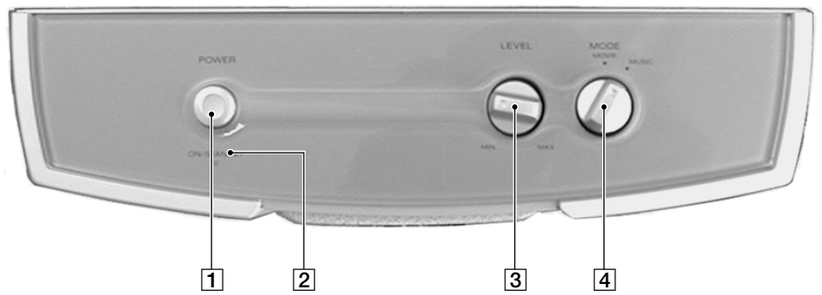
ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.

SECTION 1
GENERAL

• Location of controls

– Front view (a part) –



1 POWER button
2 ON/STANDBY indicator
3 LEVEL dial
4 MODE dial

SECTION 2
DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For printed wiring boards.
Note:
- o——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ▒▒▒ : Pattern from the side which enables seeing.

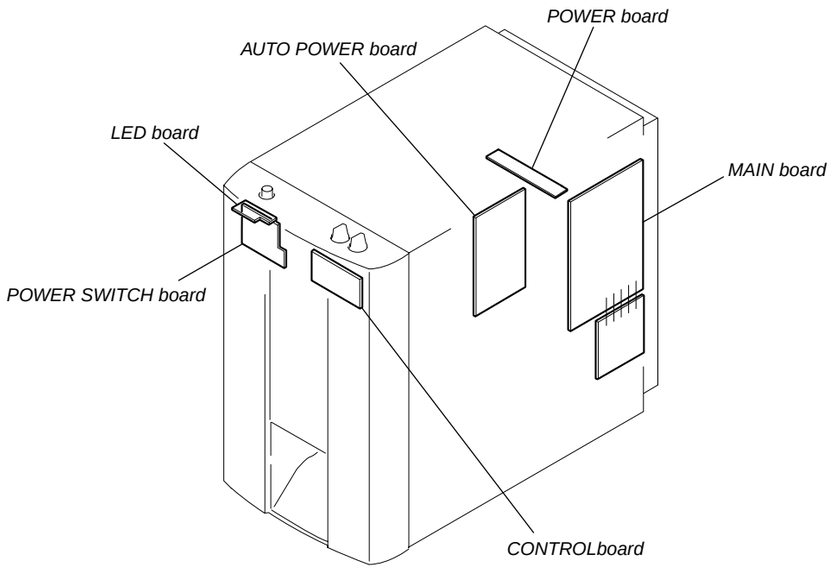
For schematic diagrams.
Note:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▭ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

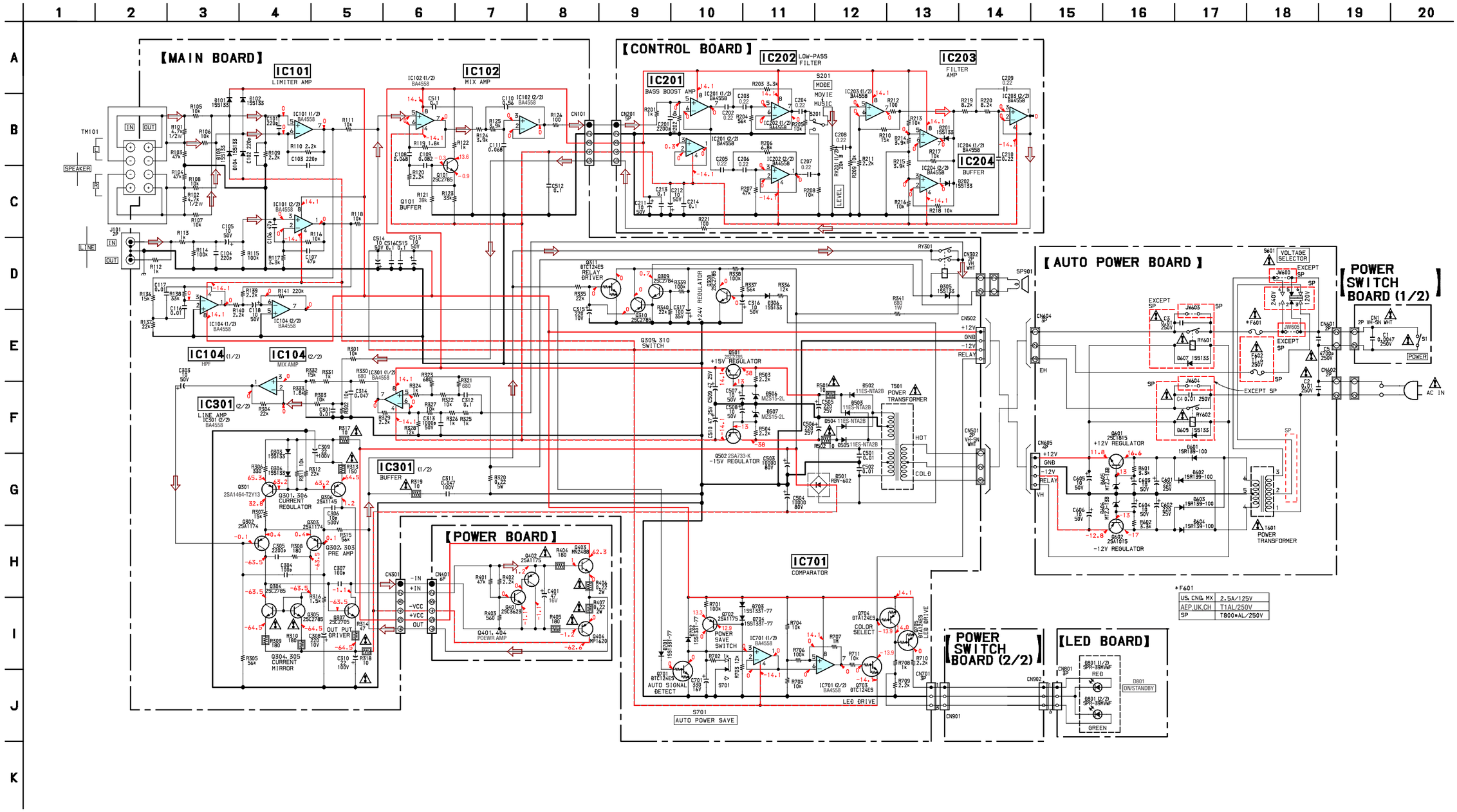
- ▬▬ : B+ Line.
- ▬ ▬ ▬ : B– Line.
- Voltages are dc with respect to ground under no-signal conditions.
  no mark : Power on
  ＊ : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal prediction tolerances.
- Signal path.
  ⇨ : AUDIO

• Abbreviation
CND : Canadian model
SP : Singapore model
MX : Mexican model

2-1. Circuit Boards Location



2-3. SCHEMATIC DIAGRAM

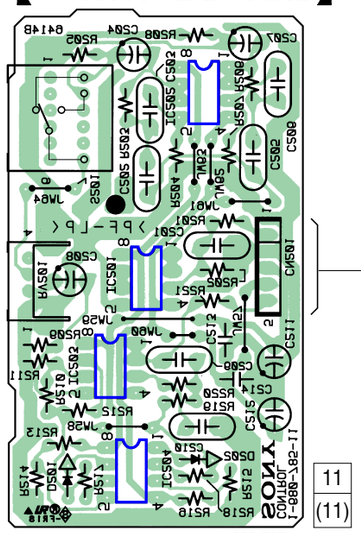


2-2. PRINTED WIRING BOARD

• See page 3 for Circuit Boards Location.

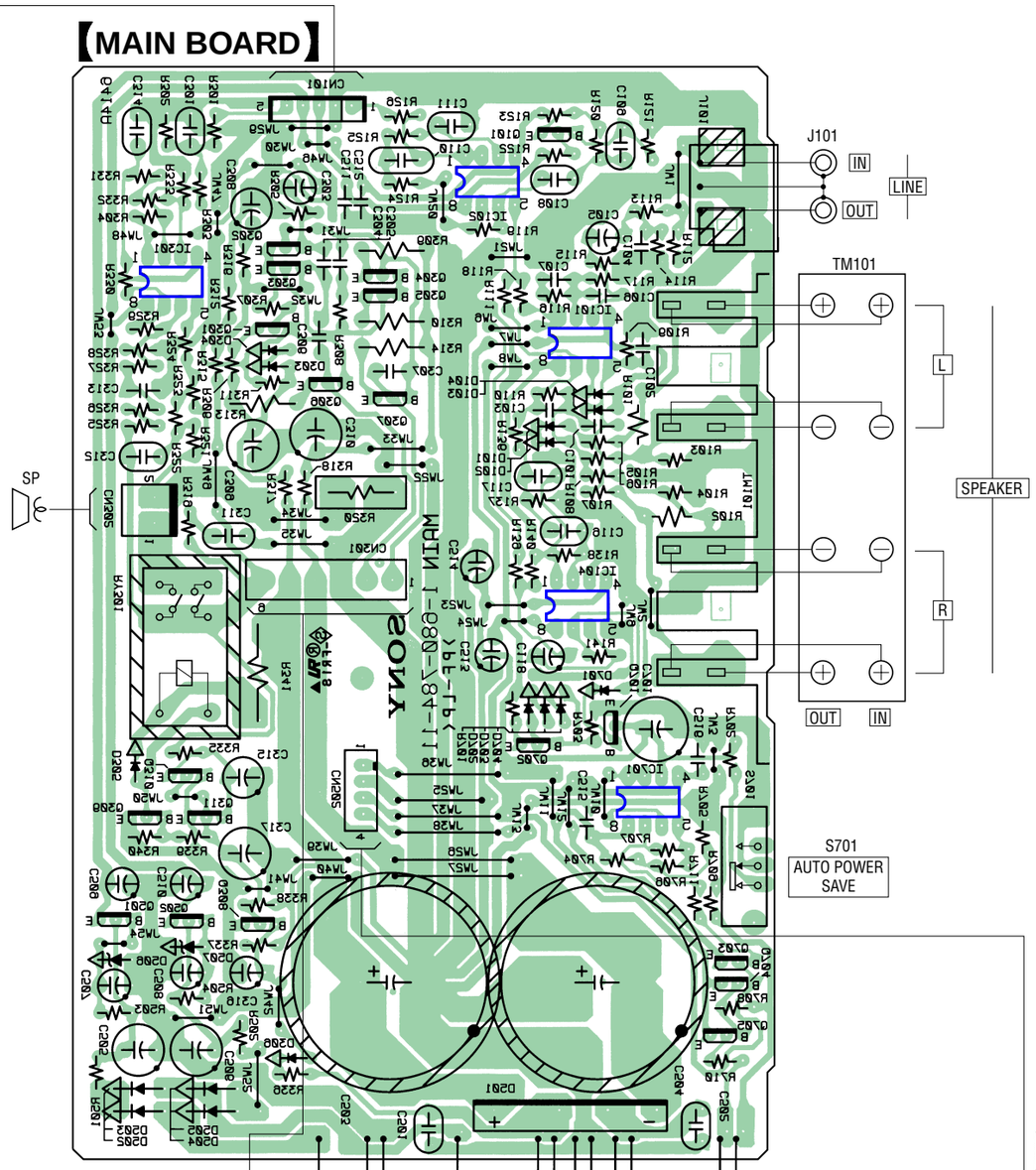
There are a few cases that the part isn't mounted in model is printed on diagram.

【CONTROL BOARD】

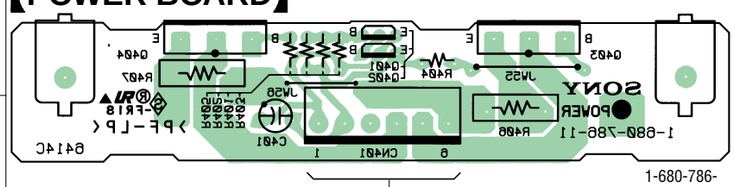


1-680-785-

【MAIN BOARD】



【POWER BOARD】

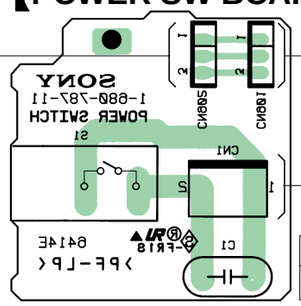


1-680-786-

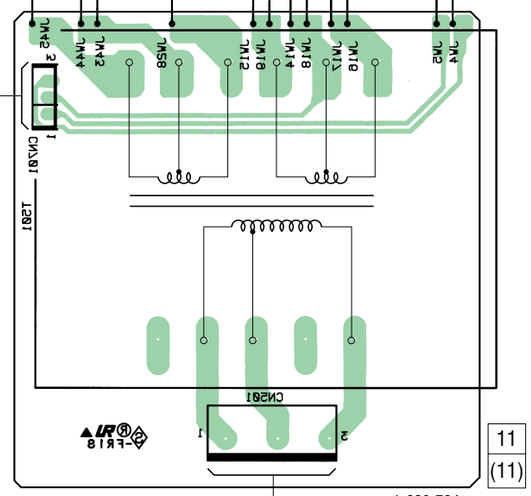
【LED BOARD】

1-680-788-

【POWER SW BOARD】

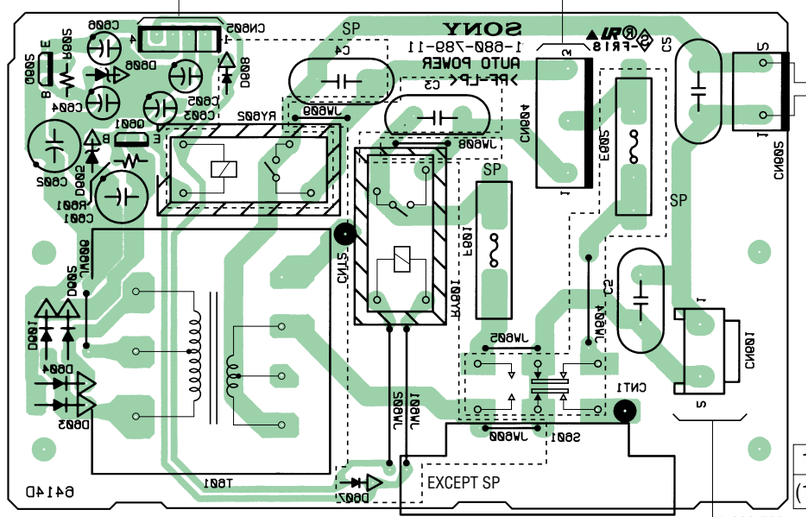


1-680-787-



1-680-784-

【AUTO POWER BOARD】



1-680-789-

- **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D101	B-5	Q101	A-5
D102	B-5	Q301	B-4
D103	B-6	Q302	A-4
D104	B-6	Q303	A-4
D303	B-4	Q304	A-5
D304	B-4	Q305	A-5
D305	C-4	Q306	B-4
D306	E-4	Q307	B-5
D501	E-4	Q308	D-4
D502	E-4	Q309	D-4
D503	E-4	Q310	C-4
D505	E-4	Q311	D-4
D506	D-4	Q501	D-4
D507	D-4	Q502	D-4
D701	C-5	Q701	C-6
D702	C-5	Q702	C-5
D703	C-5	Q703	D-6
D704	C-5	Q704	D-4
		Q705	D-4
IC101	A-6		
IC102	A-5		
IC104	C-4		

SECTION 3
EXPLODED VIEWS

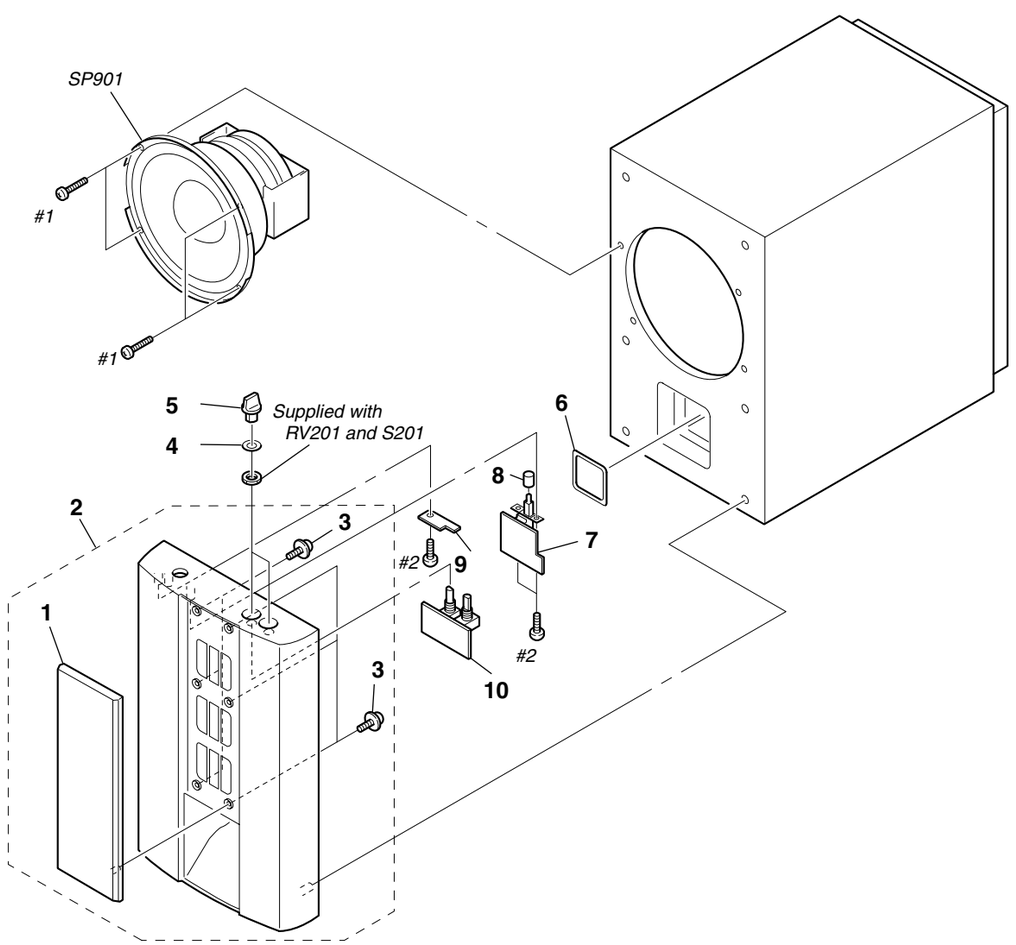
NOTE:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)

  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied
- Accessories and packing materials are given. in the last of the electrical parts list.
- Abbreviation
  CND : Canadian model
  SP : Singapore model
  MX: Me xican model
  CH : Chinese model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

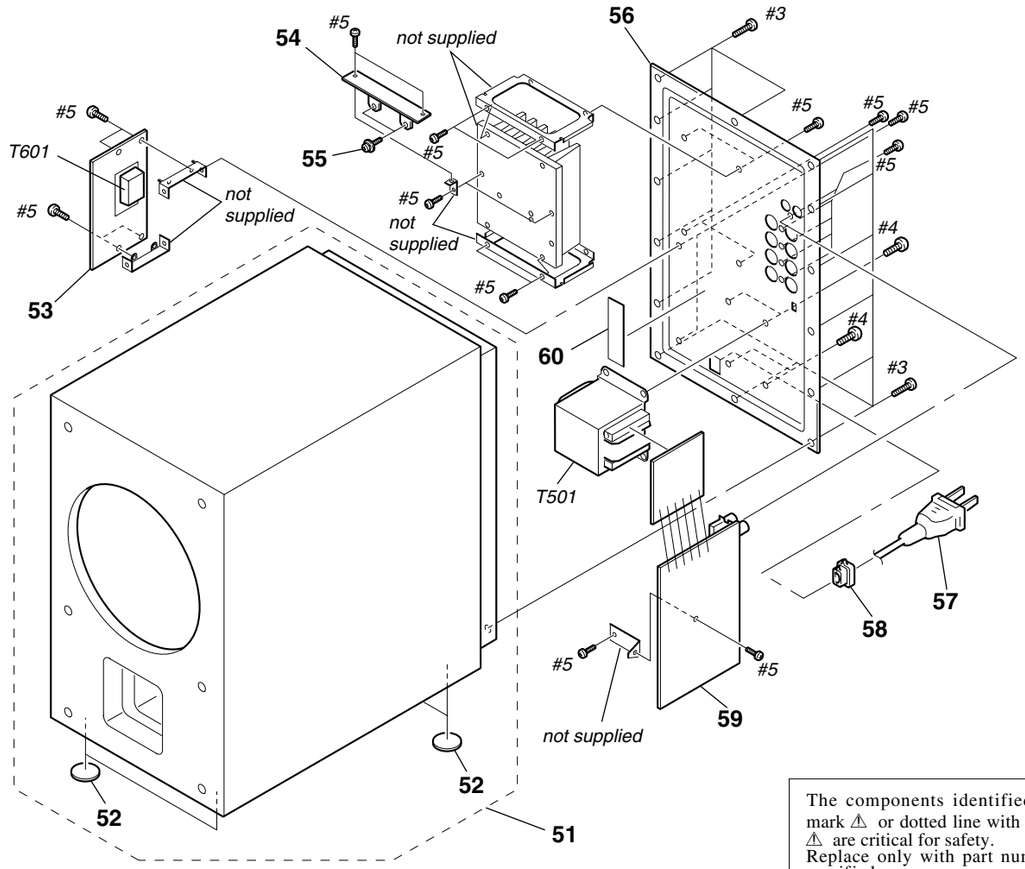
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

3-1. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
1	X-4953-330-1	FRAMEASSY, GRILLE	
2	X-4953-555-1	PANELASSY, FRONT	
3	3-703-564-21	SCREW,TAPPING	
4	4-227-298-01	SHEET	
5	4-999-482-31	KNOB(VOL)	
6	4-231-866-01	PACKING	
7	1-680-787-11	POWER SWITCH BOARD	
8	4-973-938-51	KNOB(A), PUSH	
9	1-680-788-11	LED BOARD	
10	1-680-785-11	CONTROL BOARD	
SP901	1-529-296-11	SPEAKER (20CM)	

3-2. REAR PANEL SECTION

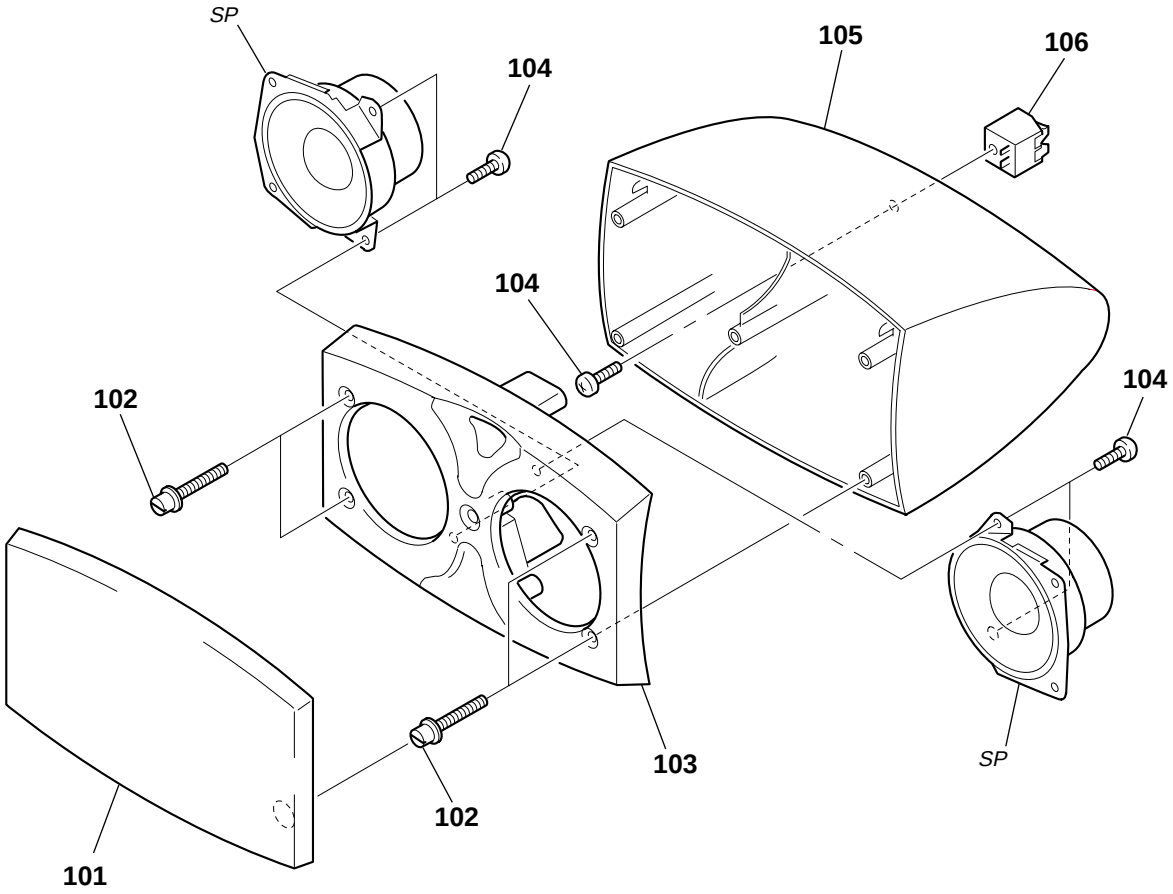


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified .

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
51	A-4412-638-A	CABINET ASSY, SPEAKER (EXCEPT CH)	
51	A-4735-424-A	CABINET ASSY, SPEAKER (CH)	
52	4-981-864-01	FOOT	
53	1-680-789-11	AUTO POWER BOARD	
54	1-680-786-11	POWER BOARD	
55	3-905-609-01	SCREW(TRANSISTOR)	
56	4-232-739-11	PANEL, REAR (US,MX)	
56	4-232-739-21	PANEL, REAR (AEP,UK)	
56	4-232-739-31	PANEL, REAR (CND)	
56	4-232-739-41	PANEL, REAR (SP)	
56	4-232-739-51	PANEL, REAR (CH)	
⚠ 57	1-777-071-21	CORD,POWER (AEP,UK,SP)	
⚠ 57	1-782-464-41	CORD,POWER (CH)	
⚠ 57	1-783-820-11	CORD,POWER (US,CND,MX)	
* 58	3-703-244-00	BUSHING (2104), CORD	
59	A-4476-543-A	MAIN BOARD ,COMPLETE	
* 60	3-703-044-26	LABEL, CAUTION (US,CND,MX)	
⚠ T501	1-435-999-11	TRANSFORMER, POWER (US,CND,MX)	
⚠ T501	1-437-219-11	TRANSFORMER, POWER (SP)	
⚠ T501	1-437-246-11	TRANSFORMER, POWER (AEP,UK,CH)	
⚠ T601	1-435-993-11	TRANSFORMER, POWER (US,CND,MX)	
⚠ T601	1-435-994-11	TRANSFORMER, POWER (AEP,UK,CH)	
⚠ T601	1-435-995-11	TRANSFORMER, POWER (SP)	

3-3. SS-V521, SS-MS525 SECTION



Ref. No.	Part No.	Description	Remark
101	X-4953-331-1	FRAME ASSY, GRILLE	
102	4-231-872-01	SCREW, ORNAMENTAL	
103	4-231-867-01	PANEL, FRONT	
104	4-986-971-11	SCREW (3.5)	
105	X-4953-556-1	CABINET ASSY	

Ref. No.	Part No.	Description	Remark
106	1-694-516-21	TERMINAL, SPEAKER	
SP	1-529-977-11	SPEAKER (5CM)	

AUTO POWER CONTROL SECTION 4 ELECTRICAL PARTS LIST

NOTE:
- Due to standardization, replacements in the par ts list ma y be dif ferent from the parts specif ied in the dia grams or the components used on the set.
- -XX, -X mean standardiz ed par ts, so the y may ha ve some dif ference fr om the or iginal one.
- Items marked "*"are not stock ed since the y are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS: uF: µF
- RESIST ORS All resistors are in ohms. METAL: metal-f ilm resistor METAL OXIDE: Metal Oxide-f ilm resistor F: nonflammable
- COILS uH: µH
- SEMICONDUCT ORS In each case , u: µ, for e xample: uA...: µA... , uP A... , µP A... , uPB... , µPB... , uPC... , µPC... , uPD..., µPD...
- Abbre viation CND : Canadian model SP : Singapor e model MX : Mexican model CH : Chainese model

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remarks
	1-680-789-11	AUTO POWER BOARD			
		**********			
	1-533-217-	HOLDER, FUSE			
		< CAPACITOR >			
⚠C2	1-113-925-11	CERAMIC	0.01uF	20.00% 250V	
⚠C3	1-113-925-11	CERAMIC	0.01uF	20.00% 250V	
					(CND,AEP,UK,US,MX,CH)
⚠C4	1-113-925-11	CERAMIC	0.01uF	20.00% 250V	
					(SP)
⚠C5	1-113-924-11	CERAMIC	0.0047uF	20.00%250V	
C601	1-104-666-11	ELECT	220uF	20.00% 25V	
C602	1-104-666-11	ELECT	220uF	20.00% 25V	
C603	1-126-964-11	ELECT	10uF	20.00% 50V	
C604	1-126-964-11	ELECT	10uF	20.00% 50V	
C605	1-126-964-11	ELECT	10uF	20.00% 50V	
C606	1-126-964-11	ELECT	10uF	20.00% 50V	
		< CONNECTOR >			
CN601	1-564-505-11	PLUG, CONNECTOR 2P			
CN602	1-564-505-11	PLUG, CONNECTOR 2P			
* CN604	1-564-104-00	PIN, CONNECTOR (B3P-VH) 3P			
* CN605	1-564-507-11	PLUG, CONNECTOR 4P			
		< DIODE >			
D601	8-719-974-59	DIODE 1SR139-100			
D602	8-719-974-59	DIODE 1SR139-100			
D603	8-719-974-59	DIODE 1SR139-100			
D604	8-719-974-59	DIODE 1SR139-100			
D605	8-719-921-88	DIODE MTZJ-13B			
D606	8-719-921-88	DIODE MTZJ-13B			
D607	8-719-911-19	DIODE 1SS119-25 (CND,AEP,UK,US,MX,CH)			
D608	8-719-911-19	DIODE 1SS119-25 (SP)			
		<FUSE>			
⚠F601	1-532-744-11	FUSE 2.5A/125V (US,CND,MX)			
⚠F601	1-532-463-31	FUSE TIME-LAG T1AL/250V (AEP,UK,CH)			
⚠F601	1-532-215-00	FUSE TIME-LAG T800mAL/250V (SP)			
⚠F602	1-532-259-00	FUSE TIME-LAG T1.6AL/250V (SP)			
		< TRANSISTOR >			
Q601	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q602	8-729-173-38	TRANSISTOR 2SA733-K			
		< RESISTOR >			
R601	1-247-843-11	CARBON	3.3K	5% 1/4W	
R602	1-247-843-11	CARBON	3.3K	5% 1/4W	
		< RELAY >			
⚠RY601	1-755-276-11	RELAY, POWER (CND,AEP,UK,US,MX,CH)			
⚠RY602	1-755-276-11	RELAY, POWER (SP)			
		< SWITCH >			
⚠S601	1-771-474-11	SWITCH, POWER			
					(VOLTAGE SELECTOR)(SP,MX)
**********					
	1-680-785-11	CONTROL BOARD			
		**********			
		< CAPACITOR >			
C201	1-136-165-00	MYLAR	0.1uF	5.00% 50V	
C202	1-136-169-00	MYLAR	0.22uF	5.00% 50V	
C203	1-136-169-00	MYLAR	0.22uF	5.00% 50V	
C204	1-136-169-00	MYLAR	0.22uF	5.00% 50V	
C205	1-136-169-00	MYLAR	0.22uF	5.00% 50V	
C206	1-136-169-00	MYLAR	0.22uF	5.00% 50V	
C207	1-136-169-00	MYLAR	0.22uF	5.00% 50V	
C208	1-136-169-00	MYLAR	0.22uF	5.00% 50V	
C209	1-136-169-00	MYLAR	0.22uF	5.00% 50V	
C210	1-136-169-00	MYLAR	0.22uF	5.00% 50V	
C211	1-126-964-11	ELECT	10uF	20.00% 50V	
C212	1-126-964-11	ELECT	10uF	20.00% 50V	
C213	1-136-165-00	MYLAR	0.1uF	5.00% 50V	
C214	1-136-165-00	MYLAR	0.1uF	5.00% 50V	
		< CONNECTOR >			
* CN201	1-564-508-11	PLUG, CONNECTOR 5P			
		< DIODE >			
D201	8-719-991-33	DIODE 1SS133T-77			
D202	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC201	8-759-145-58	IC BA4558			
IC202	8-759-145-58	IC BA4558			
IC203	8-759-145-58	IC BA4558			
IC204	8-759-145-58	IC BA4558			
		< RESISTOR >			
R201	1-247-831-91	CARBON	1K	5% 1/4W	
R202	1-247-855-91	CARBON	10K	5% 1/4W	

Ref. No.	Part No.	Description			Remarks
R203	1-247-843-11	CARBON	3.3K	5%	1/4W
R204	1-247-873-91	CARBON	56K	5%	1/4W
R205	1-247-855-91	CARBON	10K	5%	1/4W
R206	1-247-851-91	CARBON	6.8K	5%	1/4W
R207	1-247-871-91	CARBON	47K	5%	1/4W
R208	1-247-855-91	CARBON	10K	5%	1/4W
R209	1-247-855-91	CARBON	10K	5%	1/4W
R210	1-247-859-91	CARBON	15K	5%	1/4W
R211	1-247-839-91	CARBON	2.2K	5%	1/4W
R212	1-247-807-31	CARBON	100	5%	1/4W
R213	1-247-855-91	CARBON	10K	5%	1/4W
R214	1-247-845-91	CARBON	3.9K	5%	1/4W
R215	1-247-845-91	CARBON	3.9K	5%	1/4W
R216	1-247-855-91	CARBON	10K	5%	1/4W
R217	1-247-855-91	CARBON	10K	5%	1/4W
R218	1-247-855-91	CARBON	10K	5%	1/4W
R219	1-247-853-91	CARBON	8.2K	5%	1/4W
R220	1-247-853-91	CARBON	8.2K	5%	1/4W
R221	1-247-807-31	CARBON	100	5%	1/4W
		< VARIABLE RESISTOR >			
RV201	1-225-826-11	RES, VAR, CARBON 20K			
		< SWITCH >			
S201	1-771-632-11	SWITCH, ROTARY			
**********					
	A-4476-543-A	MAIN MOUNTED BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-162-286-31	CERAMIC	220PF	10%	50V
C102	1-162-286-31	CERAMIC	220PF	10%	50V
C103	1-162-286-31	CERAMIC	220PF	10%	50V
C104	1-162-286-21	CERAMIC	220PF	10.00%	50V
C105	1-126-964-11	ELECT	10uF	20.00%	50V
C106	1-162-215-31	CERAMIC	47PF	5%	50V
C107	1-162-215-31	CERAMIC	47PF	5%	50V
C108	1-136-163-00	MYLAR	0.068uF	5.00%	50V
C109	1-136-164-00	MYLAR	0.082uF	5.00%	50V
C110	1-136-174-00	MYLAR	0.56uF	5.00%	50V
C111	1-136-163-00	MYLAR	0.068uF	5.00%	50V
C116	1-136-153-00	FILM	0.01uF	5%	50V
C117	1-136-153-00	FILM	0.01uF	5%	50V
C118	1-126-964-11	ELECT	10uF	20.00%	50V
C301	1-136-153-00	FILM	0.01uF	5%	50V
C303	1-126-964-11	ELECT	10uF	20.00%	50V
C304	1-162-282-31	CERAMIC	100PF	10%	50V
C305	1-102-121-00	CERAMIC	2200PF	10%	50V
⚠C306	1-101-804-00	CERAMIC	10PF	5%	500V
⚠C307	1-101-810-00	CERAMIC	100PF	5%	500V
C308	1-126-934-11	ELECT	220uF	20.00%	10V
C309	1-128-560-11	ELECT	22uF	20.00%	100V
C310	1-128-560-11	ELECT	22uF	20.00%	100V
C311	1-130-313-11	FILM	0.047uF	5.00%	100V
C312	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C313	1-130-471-00	MYLAR	0.001uF	5%	50V
C314	1-136-161-00	MYLAR	0.047uF	5.00%	50V
C315	1-126-934-11	ELECT	220uF	20.00%	10V
C316	1-126-964-11	ELECT	10uF	20.00%	50V
C317	1-126-948-11	ELECT	100uF	20.00%	35V

Ref. No.	Part No.	Description			Remarks
C501	1-130-955-00	FILM	0.01uF	5%	100V
C502	1-130-955-00	FILM	0.01uF	5%	100V
C503	1-135-782-11	ELECT CHIP	10000uF	20%	80V
C504	1-135-782-11	ELECT CHIP	10000uF	20%	80V
C505	1-104-666-11	ELECT	220uF	20.00%	25V
C506	1-104-666-11	ELECT	220uF	20.00%	25V
C507	1-126-964-11	ELECT	10uF	20.00%	50V
C508	1-126-964-11	ELECT	10uF	20.00%	50V
C509	1-104-664-11	ELECT	47uF	20.00%	25V
C510	1-104-664-11	ELECT	47uF	20.00%	25V
C511	1-164-159-21	CERAMIC	0.1uF		50V
C512	1-164-159-21	CERAMIC	0.1uF		50V
C513	1-126-964-11	ELECT	10uF	20.00%	50V
C514	1-126-964-11	ELECT	10uF	20.00%	50V
C515	1-164-159-21	CERAMIC	0.1uF		50V
C516	1-164-159-21	CERAMIC	0.1uF		50V
C701	1-104-661-91	ELECT	330uF	20.00%	16V
		< CONNECTOR >			
* CN101	1-564-508-11	PLUG, CONNECTOR 5P			
* CN301	1-564-243-11	PIN, CONNECTOR 6P			
* CN302	1-565-792-11	PIN, CONNECTOR 2P			
* CN501	1-564-687-11	PIN, CONNECTOR 3P			
CN502	1-564-507-11	PLUG, CONNECTOR 4P			
CN701	1-564-506-11	PLUG, CONNECTOR 3P			
		< DIODE >			
D101	8-719-991-33	DIODE 1SS133T-77			
D102	8-719-991-33	DIODE 1SS133T-77			
D103	8-719-991-33	DIODE 1SS133T-77			
D104	8-719-991-33	DIODE 1SS133T-77			
D303	8-719-991-33	DIODE 1SS133T-77			
D304	8-719-991-33	DIODE 1SS133T-77			
D305	8-719-991-33	DIODE 1SS133T-77			
D306	8-719-991-33	DIODE 1SS133T-77			
D501	8-719-302-37	DIODE RBV-602			
D502	8-719-974-59	DIODE 1SR139-100			
D503	8-719-974-59	DIODE 1SR139-100			
D504	8-719-974-59	DIODE 1SR139-100			
D505	8-719-974-59	DIODE 1SR139-100			
D506	8-719-921-88	DIODE MTZJ-13B			
D507	8-719-921-88	DIODE MTZJ-13B			
D701	8-719-991-33	DIODE 1SS133T-77			
D702	8-719-991-33	DIODE 1SS133T-77			
D703	8-719-991-33	DIODE 1SS133T-77			
D704	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC101	8-759-145-58	IC BA4558			
IC102	8-759-145-58	IC BA4558			
IC104	8-759-145-58	IC BA4558			
IC301	8-759-145-58	IC BA4558			
IC701	8-759-145-58	IC BA4558			
		< JACK >			
J101	1-785-795-11	JACK, PIN 2P			
		< TRANSISTOR >			
Q101	8-729-178-55	TRANSISTOR 2SC2785-E			
Q301	8-729-117-41	TRANSISTOR 2SA1174-P			
Q302	8-729-117-41	TRANSISTOR 2SA1174-P			

MAIN

Ref. No.	Part No.	Description				Remarks
Q303	8-729-117-41	TRANSISTOR	2SA1174-P			
Q304	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q305	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q306	8-729-214-51	TRANSISTOR	2SA1145-O			
Q307	8-729-270-51	TRANSISTOR	2SC2705-O			
Q308	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q309	8-729-178-41	TRANSISTOR	2SC2784-P			
Q310	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q311	8-729-029-86	TRANSISTOR	DTC124ESA			
Q501	1-800-937-11	TRANSISTOR	2SC2003			
Q502	1-800-938-11	TRANSISTOR	2SA954			
Q701	8-729-029-86	TRANSISTOR	DTC124ESA			
Q702	8-729-119-77	TRANSISTOR	2SA1175-FEK			
Q703	8-729-029-86	TRANSISTOR	DTC124ESA			
Q704	8-729-029-40	TRANSISTOR	DTA124ESA			
Q705	8-729-029-40	TRANSISTOR	DTA124ESA			
		< RESISTOR >				
R101	1-260-107-11	CARBON	4.7K	5%	1/2W	
R102	1-260-107-11	CARBON	4.7K	5%	1/2W	
R103	1-247-871-91	CARBON	47K	5%	1/4W	
R104	1-247-871-91	CARBON	47K	5%	1/4W	
R105	1-247-855-91	CARBON	10K	5%	1/4W	
R106	1-247-855-91	CARBON	10K	5%	1/4W	
R107	1-247-855-91	CARBON	10K	5%	1/4W	
R108	1-247-855-91	CARBON	10K	5%	1/4W	
R109	1-247-839-91	CARBON	2.2K	5%	1/4W	
R110	1-247-839-91	CARBON	2.2K	5%	1/4W	
R111	1-247-855-91	CARBON	10K	5%	1/4W	
R112	1-247-831-91	CARBON	1K	5%	1/4W	
R113	1-247-831-91	CARBON	1K	5%	1/4W	
R114	1-247-879-91	CARBON	100K	5%	1/4W	
R115	1-247-879-91	CARBON	100K	5%	1/4W	
R116	1-247-855-91	CARBON	10K	5%	1/4W	
R117	1-247-843-11	CARBON	3.3K	5%	1/4W	
R118	1-247-855-91	CARBON	10K	5%	1/4W	
R119	1-247-837-91	CARBON	1.8K	5%	1/4W	
R120	1-247-839-91	CARBON	2.2K	5%	1/4W	
R121	1-247-869-81	CARBON	39K	5%	1/4W	
R122	1-247-831-91	CARBON	1K	5%	1/4W	
R123	1-247-867-81	CARBON	33K	5%	1/4W	
R124	1-247-845-91	CARBON	3.9K	5%	1/4W	
R125	1-247-845-91	CARBON	3.9K	5%	1/4W	
R126	1-247-807-31	CARBON	100	5%	1/4W	
R136	1-247-859-91	CARBON	15K	5%	1/4W	
R137	1-247-863-91	CARBON	22K	5%	1/4W	
R138	1-247-867-81	CARBON	33K	5%	1/4W	
R139	1-247-839-91	CARBON	2.2K	5%	1/4W	
R140	1-247-839-91	CARBON	2.2K	5%	1/4W	
R141	1-247-887-00	CARBON	220K	5%	1/4W	
R301	1-247-855-91	CARBON	10K	5%	1/4W	
R302	1-247-855-91	CARBON	10K	5%	1/4W	
R303	1-247-855-91	CARBON	10K	5%	1/4W	
R304	1-247-863-91	CARBON	22K	5%	1/4W	
R305	1-247-873-91	CARBON	56K	5%	1/4W	
R306	1-247-819-81	CARBON	330	5%	1/4W	
R307	1-247-859-91	CARBON	15K	5%	1/4W	
R308	1-249-408-91	CARBON	180	5%	1/4W	
⚠R309	1-247-813-91	CARBON	180	5%	1/4W	F
⚠R310	1-249-408-91	CARBON	180	5%	1/4W	F
R311	1-247-855-91	CARBON	10K	5%	1/4W	
R312	1-247-863-91	CARBON	22K	5%	1/4W	
⚠R313	1-249-407-11	CARBON	150	5%	1/4W	F
⚠R314	1-249-401-11	CARBON	47	5%	1/4W	F
R315	1-247-873-91	CARBON	56K	5%	1/4W	
R316	1-247-835-91	CARBON	1.5K	5%	1/4W	
⚠R317	1-249-393-11	CARBON	10	5%	1/4W	F
⚠R318	1-249-393-11	CARBON	10	5%	1/4W	F
⚠R319	1-249-393-11	CARBON	10	5%	1/4W	F
R320	1-217-156-00	METAL	0.22	10%	5W	
R321	1-215-868-00	METAL OXIDE	680	5%	1W	
R322	1-247-855-91	CARBON	10K	5%	1/4W	
R323	1-247-827-91	CARBON	680	5%	1/4W	
R324	1-247-831-91	CARBON	1K	5%	1/4W	
R325	1-247-831-91	CARBON	1K	5%	1/4W	
R326	1-247-831-91	CARBON	1K	5%	1/4W	
R327	1-247-855-91	CARBON	10K	5%	1/4W	
R328	1-247-857-91	CARBON	12K	5%	1/4W	
R329	1-247-839-91	CARBON	2.2K	5%	1/4W	
R330	1-215-868-00	METAL OXIDE	680	5%	1W	
R331	1-247-831-91	CARBON	1K	5%	1/4W	
R332	1-247-859-91	CARBON	15K	5%	1/4W	
R333	1-247-837-91	CARBON	1.8K	5%	1/4W	
R335	1-247-863-91	CARBON	22K	5%	1/4W	
R336	1-247-857-91	CARBON	12K	5%	1/4W	
R337	1-247-873-91	CARBON	56K	5%	1/4W	
R338	1-247-879-91	CARBON	100K	5%	1/4W	
R339	1-247-879-91	CARBON	100K	5%	1/4W	
R340	1-247-863-91	CARBON	22K	5%	1/4W	
R341	1-215-868-00	METAL OXIDE	680	5%	1W	
⚠R501	1-249-393-11	CARBON	10	5%	1/4W	F
⚠R502	1-249-393-11	CARBON	10	5%	1/4W	F
R503	1-247-839-91	CARBON	2.2K	5%	1/4W	
R504	1-247-839-91	CARBON	2.2K	5%	1/4W	
R701	1-247-879-91	CARBON	100K	5%	1/4W	
R702	1-247-831-91	CARBON	1K	5%	1/4W	
R703	1-247-857-91	CARBON	12K	5%	1/4W	
R704	1-247-855-91	CARBON	10K	5%	1/4W	
R705	1-247-855-91	CARBON	10K	5%	1/4W	
R706	1-247-879-91	CARBON	100K	5%	1/4W	
R707	1-247-903-00	CARBON	1M	5%	1/4W	
R708	1-247-831-91	CARBON	1K	5%	1/4W	
R709	1-247-839-91	CARBON	2.2K	5%	1/4W	
R710	1-247-839-91	CARBON	2.2K	5%	1/4W	
R711	1-247-855-91	CARBON	10K	5%	1/4W	
		< RELAY >				
RY301	1-515-920-11	RELAY (24V)				
		< SWITCH >				
S701	1-571-588-21	SWITCH, SLIDE				
		< TERMINAL >				
TM101	1-537-737-11	TERMINAL BOARD				

****

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LED POWER POWER SWITCH

Ref. No.	Part No.	Description				Remarks
	1-680-788-11	LED BOARD				
		*********				
		< CONNECTOR >				
CN801	1-564-506-11	PLUG, CONNECTOR 3P				
		< DIODE >				
D801	8-719-028-30	DIODE SPR-39MVWF				
**********						
	1-680-786-11	POWER BOARD				
		**********				
		< CAPACITOR >				
C401	1-104-664-11	ELECT	47uF	20.00%	25V	
		< CONNECTOR >				
* CN401	1-564-243-11	PIN, CONNECTOR 6P				
		< TRANSISTOR >				
Q401	8-729-141-30	TRANSISTOR 2SC3623A-LK				
Q402	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q403	8-749-010-25	IC MN2488-OPY-M				
Q404	8-749-010-26	IC MP1620-OPY-M				
		< RESISTOR >				
R401	1-247-871-91	CARBON	47K	5%	1/4W	
R402	1-247-839-91	CARBON	2.2K	5%	1/4W	
R403	1-249-414-11	CARBON	560	5%	1/4W	F
⚠R404	1-249-408-11	CARBON	180	5%	1/4W	F
⚠R405	1-249-408-11	CARBON	180	5%	1/4W	F
⚠R406	1-217-151-00	METAL	0.22	10%	2W	
⚠R407	1-217-151-00	METAL	0.22	10%	2W	
**********						
	1-680-787-11	POWER SWITCH BOARD				
		**********				
		< CAPACITOR >				
⚠C1	1-113-924-11	CERAMIC	0.0047uF	20.00%	250V	
		< CONNECTOR >				
* CN1	1-695-044-11	PIN, CONNECTOR 2P				
		< SWITCH >				
⚠S1	1-554-920-61	SWITCH, PUSH (AC POWER)(1 KEY)				
**********						
		MISCELLANEOUS				
		**********				
SP901	1-529-296-11	SPEAKER (20CM)				
⚠T501	1-435-999-11	TRANSFORMER, POWER (US,CND,MX)				
⚠T501	1-437-219-11	TRANSFORMER, POWER (SP)				
⚠T501	1-437-246-11	TRANSFORMER, POWER (AEP,UK,CH)				
⚠T601	1-435-993-11	TRANSFORMER, POWER (US,CND,MX)				
⚠T601	1-435-994-11	TRANSFORMER, POWER (AEP,UK,CH)				
⚠T601	1-435-995-11	TRANSFORMER, POWER (SP)				
**********						

Ref. No.	Part No.	Description	Remarks
		ACCESSORIES & PACKING MATERIALS	
		**********	
⚠	1-569-008-21	ADAPTOR, CONVERSION 2P (SA-VE522/VE525)(SP)	
	1-769-329-21	CORD, CONNECTION (SA-VE522/VE525)(PIN-PIN)	
⚠	1-770-019-12	ADAPTOR CONVERSION PLUG 3P (UK)	
	1-790-503-11	CORD, SPEAKER (10m)(SA-VE525)	
	1-790-503-11	CORD, SPEAKER (10m)(SS-V521)	
	1-790-503-21	CORD, SPEAKER (2.5m)(SA-VE522/VE525)	
	1-790-503-31	CORD, SPEAKER (3.5m)(SA-VE522/VE525)	
	3-701-443-21	WASHER, 5 DIA. (SA-VE522/VE525)	
	4-233-674-11	MANUAL, INSTRUCTION (SA-VE522/VE525)(CND,UK,US) (ENGLISH,FRENCH)	
	4-233-674-21	MANUAL, INSTRUCTION (SA-VE522/VE525)(AEP)(ENGLISH,FRENCH, GERMAN,ITALIAN)	
	4-233-674-31	MANUAL, INSTRUCTION (SA-VE522/VE525)(AEP)(DUTCH,SPANISH, SWEDISH,POLISH)	
	4-233-674-41	MANUAL, INSTRUCTION (SA-VE522/VE525)(AEP)(PORTUGUESE, DANISH,FINNISH,RUSSIAN)	
	4-233-674-51	MANUAL, INSTRUCTION (SA-VE522/VE525)(MX,SP)(ENGLISH, FRENCH,SPANISH,CHINESE)	
	4-233-674-61	MANUAL, INSTRUCTION (SA-VE525 : Chinese) (ENGLISH,SIMPLIFIED CHINESE)	
	4-972-322-01	FOOT (Y)(SA-VE522/VE525)	
	4-972-322-01	FOOT (Y)(SS-V521)	
	4-233-678-11	MANUAL, INSTRUCTION (SS-V521)(US,CND)(ENGLISH,FRENCH)	
	4-233-678-21	MANUAL, INSTRUCTION (SS-V521)(AEP)(ENGLISH,FRENCH, GERMAN,ITALIAN)	
	4-233-678-31	MANUAL, INSTRUCTION (SS-V521)(AEP)(DUTCH,SPANISH, SWEDISH,POLISH)	
	4-233-678-41	MANUAL, INSTRUCTION (SS-V521)(AEP)(PORTUGUESE, DANISH,FINNISH,RUSSIAN)	
	4-233-678-51	MANUAL, INSTRUCTION (SS-V521)(E)(ENGLISH,FRENCH, SPANISH,CHINESE)	
	X-4953-333-1	STAND ASSY (SA-VE522/VE525)	
**********			
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-664-79	SCREW +P 4X20 TYPE1	
#2	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#3	7-685-662-79	SCREW +BVTP 4X14 TYPE2 N-S	
#4	7-685-660-19	SCREW +BVTP 4X10 TYPE2 N-S	
#5	7-685-647-79	SCREW +P 3X10 TYPE2 NON-SLIT	

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REVISION HISTORY

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Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.1	2001.08	Addition of Chinese model for SA-VE525
1.0	2000.01	New